TWO MICROLEPIDOPTERA ON THURBERIA THESPESIOIDES.

By August Busck, Bureau of Entomology.

Dichomeris deflecta Busck, Proc. Ent. Soc. Wash., vol. xi, p. 91, 1909.

This peculiar species was described from a single specimen from Arizona. The very long, porrected, compressed palpi with the short, deflected terminal joint are unlike those of any other species in the genus, but this is a difference of degree rather than of kind. The species is otherwise typical of the genus Dichomeris and is properly included therein.

The larva is a leaf-folder on Thurberia thespesioides and was bred by Mr. W. D. Pierce, at Santa Catalina Mountains, Arizona. The imago issued August 24, 1913. The following is a descrip-

tion of the larva.

Head and first thoracic segment dark reddish brown; eves and mouth parts black; anal plate large, black, with long black bristles. Remainder of the body white, with four straight, longitudinal rows of large, round, black tubercles, two dorsal and two lateral. There are two such tubercles on each segment in each row, and on account of their size, they are nearly confluent longitudinally. Between these rows of tubercles run a central and two lateral, thin, purplish, longitudinal lines. Below the lateral rows of tubercles each abdominal segment has two more, smaller, oval, brown tubercles, set obliquely. Each tubercle bears a single long, light colored hair. Thoracic feet black, prolegs white, each with an anterior and a posterior row of long brown hooks.

Bucculatrix thurberiella n. sp.

Face tuft, head and thorax white. Antennæ white with dark fuscous annulations. Forewings white; extreme costal edge blackish; an outwardly black streak beyond the middle of costa is continued as a very fine, easily lost line across the wing to a group of black scales below apex, where the cilia is also dotted with black; a few easily lost black scales on basal third of dorsum and a group of black scales on the middle of dorsum is followed by scattered light brown scales. The apical part of the wing above the oblique costal streak is dusted with brown and black scales. Cilia ochreous white. Hind wing and cilia ochreous white. Legs white on the inner side, black exteriorly; tarsi black with narrow white annulations. Alar expanse: 7 to 8 mm.

Habitat: Santa Catalina Mountains, Arizona.

Type: No. 16699, U. S. N. M. Bred by Mr. Pierce from Thurberia thespesioides, in August and September.

The larva is dirty white, rough skinned, with prominent, white

tubercles and with two dorsal rows of black dots, one on each segment. Head light ochreous with black eye spots and reddish brown mouth parts.

Cocoon ribbed, typical of the genus, pearly white, length 8-9 mm.

BEES VISITING THURBERIA.

By T. D. A. Cockerell.

In August, 1913, Mr. W. D. Pierce collected bees from the flowers of *Thurberia thespesioides* Gray, in Stone Cabin Canyon, Santa Rita Mountains, Arizona. This plant, given in the Synoptical Flora as a synonym of *Ingenhouzia trilobo* D. C., is so near to *Gossypium* that it was once described under that generic name. On this account any insects frequenting it are of more than ordinary interest. The bees collected are as follows:

Melissodes thurberiæ n. sp.

Female. Closely allied to and resembling M. thelypodii CkIl., to which it runs in my table in Trans. Amer. Ent. Society, 1906. It differs from thelypodii by the pale hair of thorax above (which agrees in character and arrangement with that of M. martini, except that there is no black hair); the wings darker and redder; the tegulæ piceous, with the posterior margin broadly ferruginous; scutellum with a slight median longitudinal ridge.

The disc of mesothorax has considerably smaller and closer punctures than M. martini Ckll., and they run principally in transverse lines. The same characters, and the dark tegulæ, readily distinguish it from M. hitei Ckll.. Although the hair of thorax above is creamy white, there is a little orange tuft on base of wings. White hair appears at extreme sides of fifth abdominal segment, whereas in M. hitei the hair in this place is black. Head very broad; vertex in type with only one dark hair. Length of anterior wing $11\frac{1}{3}$ mm.

Type: Cat. No. 16845, U. S. N. M., Collected on August 26.

Melissodes communis Cresson.

Female. Differs from a cotype by smaller size, and darker stigma and nervures. The single specimen is in ball condition; probably a series, well preserved, would indicate a distinct subspecies. Collected August 25.

Perdita mentzeliarum Ckll.

I cannot distinguish these from the variable species *P. mentzeliarum*, which usually visits *Nuttalia* (*Mentzelia* Auctt.). Perhaps they are strays from adjacent *Nuttalia* flowers. Two female specimens August 27.